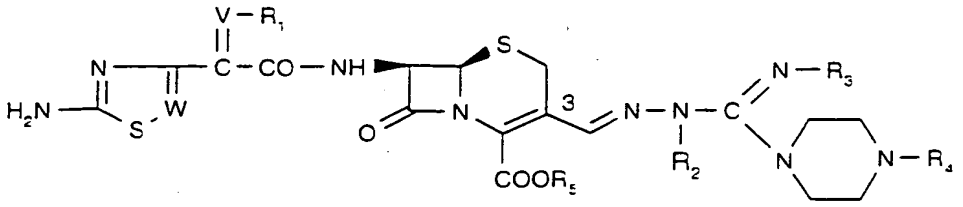
1. A compound of formula

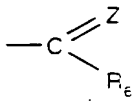


wherein

R_1 denotes hydrogen, acyl, carboxyl, or alkyl;

R_2 and R_3 are the same or different and independently of each other denote hydrogen, cycloalkyl, alkyl, alkenyl or alkinyl;

R_4 denotes hydrogen or a group of formula



wherein R_6 denotes amino, hydrazino aminoalkylamino, alkoxy, aryl, cycloalkyl, aryloxy, heterocyclyl, alkyl, alkenyl, alkinyl;

Z denotes O, S or NR_7, wherein R_7 is as defined as R_2;

R_5 denotes hydrogen or an ester moiety;

W denotes CH or N;

V denotes CH or N-O;

with the proviso that compounds of formula I wherein

a) V is N-O, W is CH, R_1 is CH_3, R_2 is H, R_3 is CH_3 and R_4 is H;

b) V is N-O, W is CH, R_1 is CH_3, R_2 is H, R_3 is H and R_4 is H;

c) V is N-O, W is CH, R_1 is CH_3, R_2 is CH_3, R_3 is H and R_4 is H;

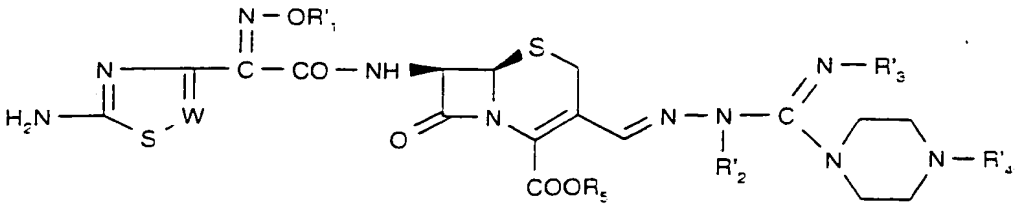
d) V is N-O, W is CH, R_1 is H, R_2 is H, R_3 is H and R_4 is H;

e) V is N-O, W is CH, R_1 is H, R_2 is CH_3, R_3 is H and R_4 is H; and

f) V is N-O, W is N, R_1 is CH_2F, R_2 is H, R_3 is H and R_4 is H;

are excluded.

2. A compound of formula



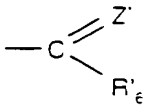
Ia

wherein W and R_5 are as defined in claim 1,

R'_1 denotes hydrogen or alkyl,

R'_2 and R'_3 are the same or different and independently of each other denote hydrogen; alkenyl, or alkyl, and

R'_4 denotes hydrogen or a group of formula



wherein

Z' denotes O or NR'_7, wherein R'_7 denotes hydrogen or alkyl; and

R'_6 denotes amino; aminoalkylamino; hydrazino; alkoxy; unsubstituted aryl or substituted aryl; cycloalkyl; a 5 to 6 membered, heterocycle containing 1 to 3 nitrogen and/or sulphur- and/or oxygen atoms; unsubstituted alkyl, or substituted alkyl, e.g. one or several-fold; by unsubstituted aryl, or substituted aryl by hydroxy, alkoxy, phenoxy; aryloxy; amino; hydroxy; carboxy; guanidino or nitroguanidino; or a heterocyclyl-carboximino group,

with the proviso that compounds of formula Ia wherein

a) W is CH, R'_1 is CH_3, R'_2 is H, R'_3 is CH_3 and R'_4 is H;

b) W is CH, R'_1 is CH_3, R'_2 is H, R'_3 is H and R'_4 is H;

c) W is CH, R'_1 is CH_3, R'_2 is CH_3, R'_3 is H and R'_4 is H;

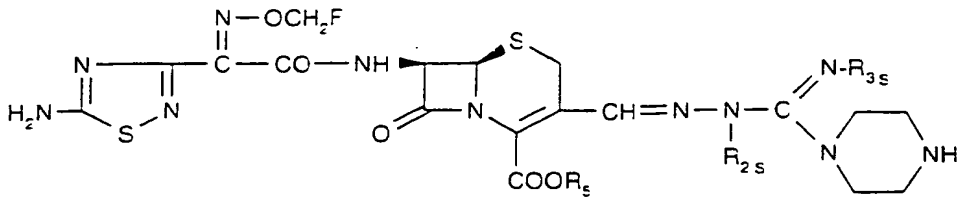
d) W is CH, R'_1 is H, R'_2 is H, R'_3 is H and R'_4 is H;

e) W is CH, R'_1 is H, R'_2 is CH_3, R'_3 is H and R'_4 is H; and

f) W is N, R'_1 is CH_2F, R'_2 is H, R'_3 is H and R'_4 is H;

are excluded.

3. A compound of formula



Is

wherein

R_5 is as claimed in claim1;

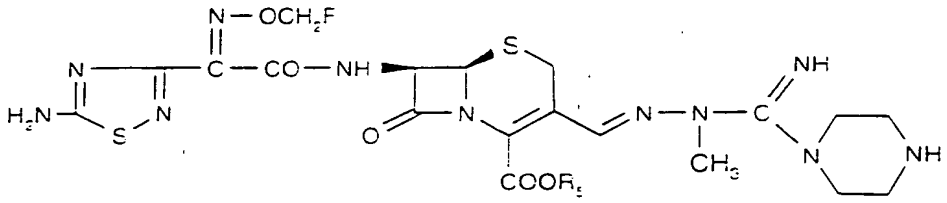
R_{2s} and R_{3s} independently of each other denote alkyl, aralkyl, alkenyl, or alkinyl; and R_{3s} additionally denotes hydrogen,

with the proviso that a compound of formula Is wherein

R_{2s} is H and R_{3s} is H

are excluded.

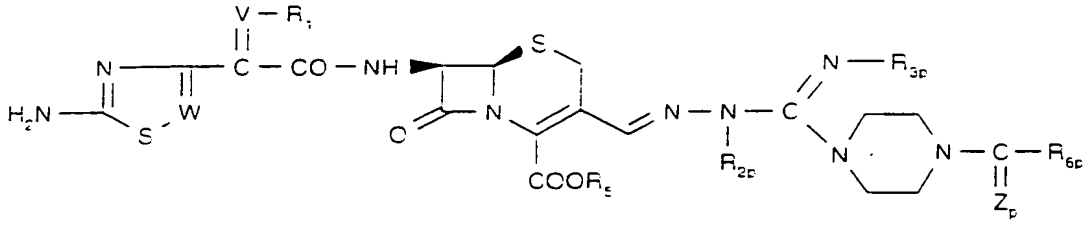
4. A compound of formula



I_{p1}

wherein R_5 is as defined in claim 1.

5. A compound of formula



I_{p2}

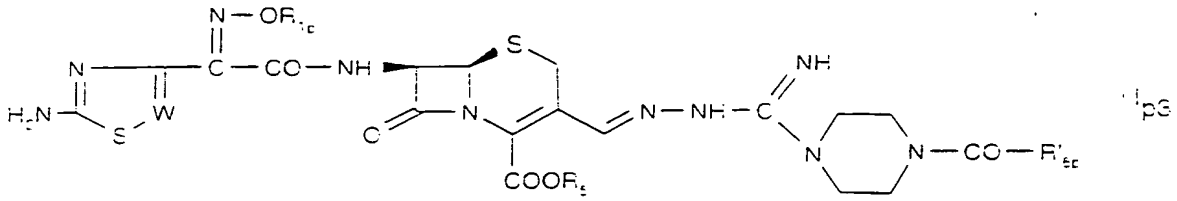
wherein R_1, R_5, W and V are as defined in claim 1,

R_{2p} and R_{3p} are the same or different and independently of each other denote hydrogen, cycloalkyl, or alkyl substituted by halogen or hydroxy,

R_{6p} denotes amino, unsubstituted or substituted alkylamino or dialkylamino, alkoxy, aryl, cycloalkyl, aryloxy, an unsubstituted 5- or 6-membered, saturated, partially saturated or unsaturated heterocycle which may be condensed containing 1 to 5 nitrogen and/or 1 to 3 sulphur- and/or oxygen atoms, a substituted 5- or 6-membered, saturated, partially saturated or

unsaturated heterocycle which may be condensed containing 1 to 5 nitrogen and/or 1 to 3 sulphur- and/or oxygen atoms by amino, hydroxy, alkoxy, acyloxy, carboxy or mercapto, cycloalkyl or unsubstituted straight chain or branched (C_{1-20})alkyl, (C_{1-20})alkenyl or (C_{1-20})alkinyl, which may be interrupted by N, S and/or O; once or several times substituted straight chain or branched (C_{1-20})alkyl, (C_{1-20})alkenyl or (C_{1-20})alkinyl which may be interrupted by N, S and/or O, by hydroxy, alkoxy, aryloxy, acyloxy, carbamoyloxy, amino, alkylamino, dialkylamino, trialkylammonium, acylamino, ureido, oximino, imino, carboxy, oxo, halogen, nitro, a carboxylic acid derivative, a sulphonic acid derivative, an unsubstituted 5- or 6-membered, saturated, partially saturated or unsaturated heterocycle which may be condensed containing 1 to 5 nitrogen and/or 1 to 3 sulphur- and/or oxygen atoms; or a substituted 5- or 6-membered, saturated, partially saturated or unsaturated heterocycle which may be condensed containing 1 to 5 nitrogen and/or 1 to 3 sulphur- and/or oxygen atoms by amino, hydroxy, alkoxy, acyloxy, carboxy or mercapto; and Z_p denotes oxygen or NR_{7p}, wherein R_{7p} is as defined R_{2p}.

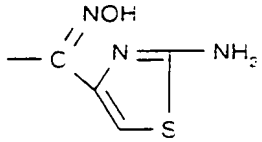
6. A compound of formula



wherein W and R_5 are as defined in claim 1,

R_{1p} denotes hydrogen or CH_2F, and

R'_{6p} denotes hydrogen, (C_{1-20})alkyl, one or two fold substituted (C_{1-20})alkyl by phenyl, phenoxy, amino, hydroxyphenyl, hydroxy, carboxyl, guanidino or nitroguanidino, unsubstituted phenyl or substituted phenyl by acetoxy, pyrrolidinyl; or a compound of formula



7. A compound of any preceding claim in the form of a salt and/or in the form of a solvate.

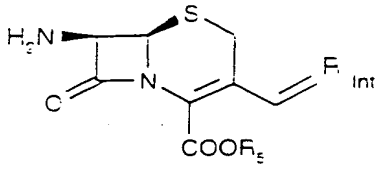
8. 7-(((5-Amino-1,2,4-thiadiazol-3-yl)-(Z)-(fluormethoxyimino)aceryl)amino)-3(E)-((imino-1-piperazinylmethyl)methylhydrazono)methyl-3-cephem-4-carboxylic acid in the form of a hydrochloride.

9. 7-(((5-Amino-1,2,4-thiadiazol-3-yl)-(Z)-(fluormethoxyimino)aceryl)amino)-3(E)-((imino-1-piperazinylmethyl)methylhydrazono)methyl-3-cephem-4-carboxylic acid in the form of a trihydrochloride.

10. A compound selected from

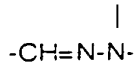
1-[(1-Methylhydrazino)iminomethyl]piperazine
1-[(1-Ethylhydrazino)iminomethyl]piperazine
1-[(1-Allylhydrazino)iminomethyl]piperazine
1-[(1-(4-Methoxybenzyl)hydrazino]iminomethyl]piperazine
1-[(1-(3,4,5-Trimethoxybenzyl)hydrazino]iminomethyl]piperazine
1-[(1-Methylhydrazino)(methylimino)methyl]piperazine
1-[(1-Methylhydrazino)(ethylimino)methyl]piperazine
Glycin-(4-hydrazinoiminomethyl)piperazide
1-(R)-(Amino(4-hydroxyphenyl)aceryl)4-(hydrazinoiminomethyl)piperazine
1,4-bis-(Hydrazinoiminomethyl)piperazine, or
1-(Hydrazinoiminomethyl)-4-(ethylimino)[3-dimethylaminopropyl)amino]methyl]-piperazine.

11. A compound of formula



I_{Int}

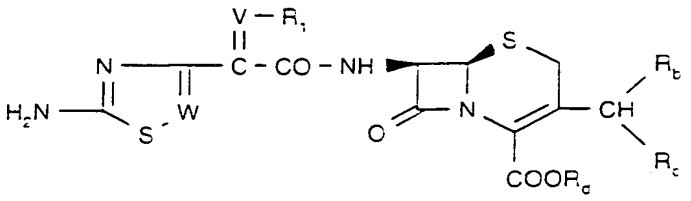
wherein R_5 is as defined in claim 1, and R_{int} denotes a group



which is formed by a bond of the terminal amine group of the hydrazino group of a compound of claim 10 and wherein the -N- group is substituted according to a compound of claim 10.

12. A process for the production of a compound of formula I, as defined in claim 1, comprising

a) Reacting a compound of formula



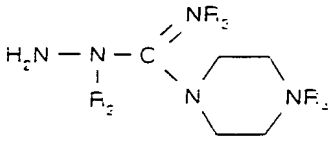
II

wherein W, V and R_1 are as defined in claim1 with the proviso of claim 1, and wherein

α) R_b denotes hydroxy and R_c and R_d together denote a bond, or

β) R_d denotes hydrogen, a cation, an ester moiety or a silyl group and R_b and R_c denote the oxo group

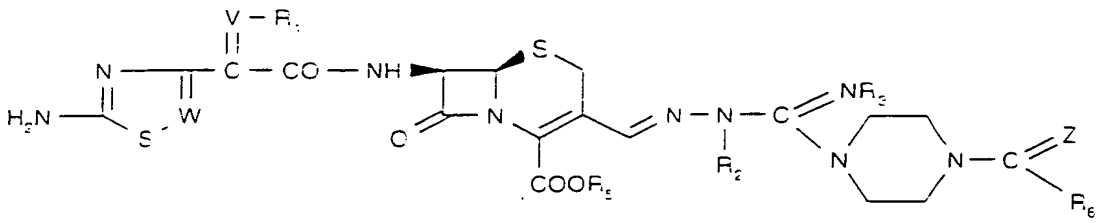
with a compound of formula



III

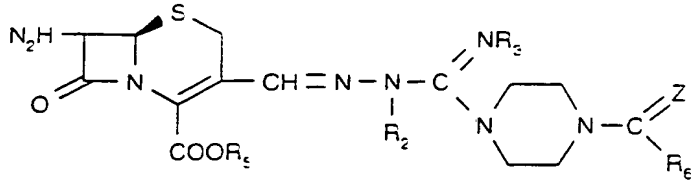
wherein R_2, R_3 and R_4 are as defined in claim1 with the proviso of claim 1,

b) for the production of a compound of formula



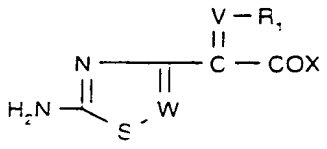
Ib

wherein W, V, Z, R_1, R_2, R_3, R_5 and R_6 are as defined in claim 1, acylating a compound of formula



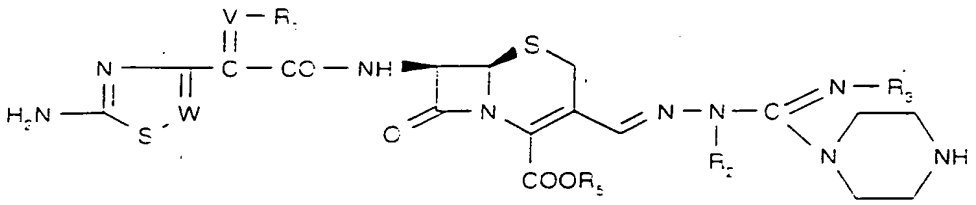
IV

wherein Z, R_2, R_3, R_5 and R_6 are as defined in claim 1, with a compound of formula



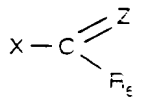
V

wherein V, W and R_1 are as defined above and X denotes a leaving group; or reacting a compound of formula



Ic

wherein R_1, R_2, R_3, R_5, V and W are as defined in claim 1, with a compound of formula



Va

wherein R_6 and Z are as defined in claim 1 and X denotes a leaving group.

13. A pharmaceutical composition comprising a compound of formula I according to claim 1 with the proviso of claim 1 in the form of a pharmaceutically acceptable salt or in free form in association with at least one pharmaceutical carrier or diluent.

14. A compound of claim 1 or a composition of claim 13 for use as a pharmaceutical.

15. A method of treatment of microbial diseases which comprises administering to a subject in need of such treatment an effective amount of a compound of formula I with the proviso of claim 1.